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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/451,286	11/30/1999	James Wichelman	10001187	8833

22878 7590 06/07/2004

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EXAMINER	
RAMAN, USHA	

ART UNIT	PAPER NUMBER
2611	5

DATE MAILED: 06/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/451,286	WICHELMAN ET AL.	
	Examiner	Art Unit	
	Usha Raman	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 November 1999*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 November 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED OFFICE ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chappell (US Pat. 6,425,132) in view of Kekic et al. (US Pat. 6,272,537) and in further view of Anderson et al. (US Pat. 5,850,388).

In regards to claims 1, 6 and 11, Chappell discloses a device that performs a spectral analysis of a node coupled to a cable head-end. The head end comprises a plurality of nodes that provide the cable services (a plurality of channels) from the head end to a plurality of subscribers. Therefore the Chappell's system comprises one group (being the head end), of number of nodes, each node having a number of channels (frequencies). The local interface performing the testing of network performance is the ingress modem. The ingress modem comprises a micro-controller (processor) coupled to the ingress modem, which comprises a program memory for storing software routines to be executed by the controller, and a display (110) coupled to the controller (and therefore to the local interface, the ingress modem). Chappell's system tests the channels by the use of a frequency sweep on a particular node to detect anomalies at a channel of that node, and display it to the display device.

Note abstract, column 1, lines 30-34, column 2, lines 43-64, column 3, lines 2-9, column 4, lines 27-30, lines 50-53, column 6, lines 14-17, and lines 30-46 of Chappell.

Chappell however lacks warning interface logic for generating a channel percent advisory upon the occurrence of an advisory event within the channel level; and generating a channel critical alarm indicator upon the occurrence of a critical channel event.

Kekic teaches of maintaining a plurality of states to indicate the state of a network node on a display. Specifically Kekic teaches having a plurality of states, indicating warning, and critical alarm states to indicate the (degrading or faulty) state of a network based on sequence of events. A series of events that cause a warning state to be triggered constitutes the advisory indication, while the series of events that cause a alarm state to be triggered constitutes the "critical" alarm indication as indicated in figure 6B. While this is taught for a computer network, one of ordinary skill can realize that this principle of logging events and detecting certain network states can be used in an analyzer for any communication network. Note figure 3B and descriptions in column 18, lines 33-57, column 21, lines 50-67, table 3 in column 22, lines 1-15, and column 76, lines 44-48 of Kekic.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Chappell with the teachings of Kekic, by implementing a warning and a critical alarm indicator that can be triggered after a

series of advisory events and critical events. The motivation would be to monitor network conditions in order to inform the status of a continually degrading or faulty network based on series of events rather than just one sampled value.

The modified system of Chappell in view of Kekic lacks indicating a percent advisory for warnings.

Anderson teaches displaying various measured network statistics in a plurality of different formats including graphs, as well as a percentage format. Note figures 18-20 and description in column 24, lines 14-42 of Anderson et al.

It would have been obvious to one of ordinary skill to represent the warning indicator in a percent format to indicate to the user the percent offset (rather than measured values) of the network fault.

In regards to claim 3, 5, 8, 10, 13 and 15, Chappell indicates that upon performing a test on the network, a node performance as well as channel status can be tested to locate an anomaly to a particular channel on the node. Note column 5, lines 59-67 and column 6, lines 1-17. It would have been obvious to apply the same modifications of the analyzer from the channel level to the node level in the modified system of Chappell in view of Kekic and Anderson to include a node percent advisory and a node critical alarm means, in order to create monitor node-level conditions of a network.

In regards to claims 2, 4, 7, 9, 12, and 14, Anderson teaches displaying the performance statistics of a individual node on a network, or the performance stats of the entire (group) network. Note column 13, lines 29-37. It would have

been obvious to further modify the system of Chappell in view of Kekic and Anderson to include a collective network performance statistics in addition to channel and node performance stats, as taught by Anderson, to indicate the status of the entire network after the occurrence of a series of events.

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (703) 305-0376. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-308-5359.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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HAI TRAN
PATENT EXAMINER